ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ

ಅಧಿಕೃತವಾಗಿ ಪ್ರಕಟಿಸಲಾದುದು

ಸಂಪುಟ ೧೬೧	ಬೆಂಗಳೂರು, ಸೋಮವಾರ, ೨೨, ಜೂನ್, ೨೦೨೬ (ಆಷಾಢ, ೦೧, ಶಕವರ್ಷ, ೧೯೪೮)	ಸಂಚಿಕೆ ೧೨೦
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ಭಾಗ ೩
ಸರ್ಕಾರದ ಆಯಾ ಇಲಾಖೆಗಳ ಮುಖ್ಯಸ್ಥರ ಮತ್ತು ಸ್ಥಳೀಯ ಪ್ರಾಧಿಕಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಅಧಿಸೂಚನೆಗಳು

KARNATAKA ELECTRICITY REGULATORY COMMISSION

No. 16 C-1, Miller Tank Bed Area, Vasantha Nagar, Bengaluru- 560 052.

NOTIFICATION

KERC/WS(DSM) /2026-27/2150, Dated: 19.06.2026.

Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers of Wind, Solar and WS-Hybrid Generation sources) Regulations, 2026.

Preamble:

The Karnataka Electricity Regulatory Commission, in exercise of the powers conferred under the clause (h) of sub-section (1) of Section 86, read with clause (zp) of sub-section (2) of Section 181 of the Act, has notified the Karnataka Electricity Grid Code (KEGC) 2025 on 21.07.2025, in line with CERC (Indian Electricity Grid Code)2023, Regulations.

The revision of schedule and its applicability for Wind -Solar sources shall be as per KEGC 2025. This requires issue of amendments to some of the clauses of Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation settlement and related matters for Wind and Solar Generation sources) Regulations, 2015 and its amendments thereof.

Karnataka Electricity Regulatory Commission in exercise of powers conferred under section 181 of the Electricity Act, 2003, read with clause (c) of sub-section (1) of section 86, has notified the Karnataka Electricity Regulatory Commission (Intra-State Deviation Settlement Mechanism and Related Matters) Regulations, 2025 on 22.07.2025. In the said Regulations, all renewable energy-based power generating stations having installed capacity of more than 5 MW (excluding Wind, Solar and WS Hybrid) were covered.

Karnataka is one of the Super Rich Renewable Energy States in the Country with estimated RE potential of 1,55,074 MW. The RE generation installed capacity is about 22045.69 MW (as on April, 2026). The break up capacity for Wind, WS-Hybrid and Solar sources is about 7870.81 MW, 738.30 MW and 10585.84 MW respectively. To achieve this, the State Regulatory mechanism has provided effective and robust framework for maintaining demand-supply balance under credible contingencies and an enabling framework for transition to clean energy sources such as solar, wind, solar-wind hybrid and ESS, biomass, co-generation, Waste to Energy, Small Hydro, Hydro PSP and other Renewable Energy Technologies.

Increase in the share of RE capacity over the years and the rise of RE penetration leads to challenges in maintaining grid stability. In order to balance the demand and supply chain and to ensure the power system stability, an effective mechanism needs to be framed for settlement of the deviation by tightening the tolerance for error bandwidth and associated DSM charges for WS generation. **To promote RE in the State, this Commission has reduced the Deviation Charges to 50% in the amendments notified to DSM Regulations for the Wind- Solar sources. These charges are nominal in nature, continued herein to ensure Grid discipline such as stability, frequency and secure balance of grid, for continuous network operations and also as a measure of Regulatory compliance by Wind –Solar generators.**

Further, the issues and challenges from capacity addition in respect of Wind-Solar Hybrid, with or without ESS also need to be addressed.

The error in forecasting and scheduling of energy generation from such sources and also an intentional mis-declaration of scheduled generation by any generator/QCA in order to make an undue commercial gain, through Charges for Deviation, increases burden on the end consumers.

The Commission, after carefully considering the above facts had published **Draft Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers and Buyers of Wind, Solar and RE-Hybrid Generation sources) Regulations, 2025** to invite comments / views / suggestions / objections from the stakeholders, general public and interested persons.

The Commission had held a Public Hearing in the matter on 07.04.2025. The Commission's Analysis and Decision on the major issues are as under:

1. **Exemption to Feeder level Solarization / PM KUSUM scheme:** Objectors have sought exemption for Solar Projects Commissioned under the said schemes contending that a farmer centric initiative which aims to utilize the Solar power at the feeder level during the daytime should be encouraged.

   In this regard, the Commission notes that a total **6728.66 MW capacity** has been considered under the said Schemes within two years**.** Out of this, already 445.56MW capacity has been commissioned till date. As on date, the total installed capacity of all the sources in the State is 38011 MW. If the capacity added under Feeder level Solarization is considered, then it amounts to 15% of the installed capacity, which clearly indicates that the exemption in such cases leads to major disturbances in the Grid, in turn affects continuity of quality power supply.

   Hence, the Commission is of the opinion that considering such exemptions for the specific schemes under above circumstances is not feasible in terms of grid security. However, the Commission has already exempted solar projects below 5MW capacity.

2. **Clause 7.5 - Scheduling, Dispatch & frequency of revisions:**

   Objectors requested to retain implementation at **4th time block** as the proposed change of schedule from **4th to 7th/8th time block,** increases the mismatch between scheduled and actual generation, reduces operational flexibility resulting in increase in DSM charges.

The Commission notes the following:

a. KEGC-2025 has been framed in alignment with the provisions of IEGC-2023 to ensure operational uniformity, grid discipline, harmonization of scheduling practices and seamless coordination between intra-State and inter-State system operations. Any deviation from the scheduling timelines prescribed under KEGC-2025 may lead to operational inconsistencies and difficulties in integrated grid operation.

b. Permitting Wind - Solar generators alone to revise schedules effective from the 4th time block, while all other generating stations and entities are governed by the 7th/8th time block revision framework, would result in scheduling imbalance. Such differential treatment may adversely impact on Load Generation Balance Report (LGBR) preparation and overall DSM management by the Load Despatch Centres.

c. The present scheduling framework under IEGC-2023 and KEGC-2025 has been evolved considering increasing integration of Real Time Market (RTM) operations, ancillary services optimization, and market-based balancing mechanisms. The revision of timeline effective from 7th/8th time block has been introduced to provide adequate visibility and certainty for market participants, power exchanges, and balancing actions closer to real-time operation.

d. The Ministry of Power has also introduced market participation obligations through the Late Payment Surcharge (LPS) Rules and other market reform measures encouraging entities to participate in market mechanisms for balancing power procurement and deviations. Frequent and shorter revision windows for select categories of generators may reduce the effectiveness of market mechanisms and may adversely impact real-time balancing efficiency.

In view of the above circumstances, the Commission is of the view that continuation of the existing revision effective from 4th time block for wind and solar generators only may not be operationally feasible under the KEGC-2025 and IEGC-2023.

Accordingly, the Commission decides to consider the need for appropriate alignment of the schedule of revision for wind and solar generators in line with the provisions of KEGC-2025 as well as IEGC-2023, wherein the revisions shall become effective from the 7th or 8th time block, as applicable to other sources, also for easy

monitoring and effective accounting including the maintenance of grid frequency well within the prescribed limits.

3. **DSM Calculation Methodology (Clause 13B(i)):**

Objectors submits the following:

a. To continue the denominator as **available capacity** instead of changing to **scheduled generation** due to sudden transition in the cloud as a result of weather variability affects accuracy of forecasting and Data/model latency (6–12 hours) and further, suggested to adopt phased implementation aligning with central Regulations or as per provisions under Tamilnadu DSM Regulations.

b. CERC has planned to implement gradually over the period of 4 years and whereas, Tamilnadu has already adopted the **Scheduled generation,** subject to capping at Rs. 3 Paise per unit multiplied by total annual generation for calculating the deviation charges.

The Commission is of the view that if all the RE Generators in the State deviate from the schedule, then State as a whole deviates resulting in payment of deviation charges by consumers, as generators are not willing to pay. This will be a burden on the consumers. Therefore, the generators shall adhere to the schedules given by them, in order to ensure the gird security, the levying of DSM charges is necessary.

In view of the above, the Commission decides to adopt Scheduled generation in denominator and ceiling limit provisions under Tamilnadu DSM Regulations, 2024 that **the total deviation charges remitted on account of deviations by wind / solar generator(s) into State Deviation Pool Account (wind and solar) in a financial year shall be capped at the Ceiling Rate of 3 paise per unit multiplied by the total annual generation at the respective Pooling sub-station(s)/QCA as applicable.**

This provision of capping on annual basis will be reviewed by the Commission after a period of 3 years from the date of Notification.

Any excess amount of deviation charges remitted beyond the capped amount as per deviation account statement over the financial year shall be adjusted in the subsequent billing without interest.

4. **Excluding Buyers from DSM:**

Objectors submitted the following:

a. Due to data constraints, applying DSM to buyers (consumers/purchasers) is currently "impossible" because the grid operator doesn't have real-time access to individual buyer data. They suggested that buyers should be excluded from these specific penalties for now.
b. Levying deviation charges on a buyer for "overdrawing" if that over drawal is caused specifically by an "under-injection" at the generation end. If the generators under-inject, they already pay a penalty. This under-injection naturally causes the buyer to draw more from the utility to meet their demand.
c. As long as the buyer does not exceed their Contract Demand, he should not be charged for over drawal, since he is already paying demand charges to the utility. Charging them a deviation penalty for this amounts to penalizing shortfall twice.

In the above circumstances, the Commission decides to exclude Buyers from DSM framework.

5. **Deviation Tolerance Band (Clause 13) -proposal to reduce from ±10% to ±5% in respect of Solar:**

Objectors submitted that as the technology is stringent, difficulty in scheduling increases the revenue losses and further requested to retain ±10% band at least for another two (2) years for solar sources.

The Commission notes the following:

a. Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024, notified on 21.08.2024, has considered Volume Limit of 5% in respect of a generating station based on solar or a hybrid of Wind – Solar resources from 01.04.2026 onwards.

b. CEA has published **Guidelines for Automatic Weather Stations (AWS) for Solar and Wind Power Plants in 07.07.2025** for accurate measurement of critical meteorological parameters to optimize the RE Generation, which inturn improves the overall generation predictability, efficiency, enhance grid

reliability and ensure regulatory compliance.

The Wind-Solar generators also need to upgrade their system forecasting accuracy by making collective effort for maintaining the Grid security and safety in order to ensure smooth energy transactions.

The State has solar installed capacity of 10,588.43MW, which constitutes 27.85% of the installed capacity of 38011MW. Below the 5MW capacity (including wind) corresponds to total capacity of around 1500 MW is already exempted. Hence, the Commission is of the opinion that relaxation under such situation is not feasible in terms of grid security.

6. **Challenges with Open Access & Inter-State transactions:**

SLDC submits the following:

a) **Switching Regimes:** generators are moving away from long-term PPAs (Power Purchase Agreements) to "Open Access" and short-term market trading.

b) **Dual Regulations:** There is complexity when a generator sells both inside the State (State DSM) and outside (CERC/Inter-State regulations). They requested a dedicated "feeder level" measurement or a separate accounting up to the interconnection point for Open Access customers to simplify billing and prevent "gaming."

c) Difficulties in operational and implementation of commercial principles/settlements in respect of Wind–Solar (WS) generators availing Short-Term Open Access (STOA) for inter-State sale through Power Exchanges.

d) Under the existing framework, WS DSM settlement for intra-State transactions is carried out at the Pooling Sub-Station (PSS) Interface Point meter based on Forecasting and Scheduling undertaken by the Qualified Coordinating Agency (QCA). However, in case any generator/s connected to the same Pooling Sub-Station opt for inter-

State sale through Power Exchanges under STOA, such generators are commercially settled under CERC DSM mechanism.

e) In the absence of separate feeder or dedicated metering arrangements for such Wind Solar generators under STOA, segregation of actual energy attributable to inter-State sale and intra-State sale at the Interface Point becomes operationally complex and dispute-prone.

f) The other States such as Maharashtra and Tamilnadu are made a suitable provision for mandating separate feeder and/or dedicated metering arrangements for generators availing STOA transactions through Power Exchanges.

g) SLDC is presently undertaking energy accounting and DSM settlement for such STOA generators based on the actual generation recorded at the generator-end meters and by applying applicable distribution losses as determined by the Commission in the Tariff Orders issued from time to time.

The Commission has the examined the above issues. To simplify billing/ DSM accounting, the Commission decides to allow the utilization of the generating station end meters for the purpose of energy accounting and DSM settlement for generators availing STOA transactions through Power Exchanges, if there is no separate feeder with dedicated metering arrangements.

For such cases, SLDC shall calculate the applicable losses for STOA transactions. The Wind-Solar (Hybrid, with or without ESS) Generators, who do not agree for the said accounting methodology can establish a separate feeder with dedicated metering arrangement for STOA transactions.
Accordingly, the following provision is incorporated in these regulations:

"Where Wind-Solar (Hybrid, with or without ESS) generator connected to a Pooling Sub-Station avails Short-Term Open Access for inter-State sale through Power Exchanges, SLDC shall undertake energy accounting and DSM settlement based on the actual generation recorded at the generator-end meter after factoring the applicable losses up to the bulk meter at the interface point, as

determined by the SLDC from time to time. The Wind-Solar (Hybrid, with or without ESS) Generators who do not agree for the said accounting methodology, can establish a separate feeder with dedicated metering arrangement for STOA transactions".

7. **Applicability of Wind- Solar (Hybrid with or without ESS) DSM Framework to Inter-State Sale of Wind/Solar Power:**

SLDC submitted the following:

a) to incorporate the provisions for applicability of the proposed Regulations to Wind, Solar and Wind–Solar Hybrid generating sources supplying power outside the State through inter-State transactions and Power Exchanges.

b) under the existing framework, generators supplying power outside the State or participating in Power Exchanges are governed by the CERC DSM Regulations and further, proposed to align the same with CERC DSM Regulations for sale power outside the State by RE generators.

In view of the above, the Commission notes the need for treatment of DSM for inter-State transactions and decides to adopt CERC DSM Regulations and its amendments issued from time to time shall be applicable for Wind, Solar and Wind–Solar Hybrid generating sources undertaking inter-State sale of power.

Accordingly, the following provision is incorporated in these regulations:

"The Deviation Charges for Over / under-injection by Generators connected to the Intra-State Transmission Network and selling power outside Karnataka shall be as per the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 and the amendments issued time to time for which, the accounting shall be done by the SLDC separately".

8. **Treatment of Zero Scheduled Generation in Deviation Calculation:**

Objectors requested to issue clarification on the mathematical errors in Deviation Calculation for the energy injected when there is a zero Scheduled Generation.

The Commission notes the following:

a) The deviation formula proposed in the Draft Regulations uses Scheduled Generation as the denominator for computation of percentage deviation. In certain situations, the Scheduled Generation declared by the generator/QCA may become zero while actual generation is available at the generator end or Pooling Sub-Station level, resulting in mathematical indeterminacy due to division by zero.

b) In absence of a specific provision for such situations may lead to ambiguity in deviation settlement and inconsistency in implementation and resulting in gaming by generators through intentional declaration of zero schedules while continuing actual injection into the grid.

c) adopting a deemed schedule linked to installed capacity may result in disproportionately high DSM exposure, particularly for large generating stations or aggregated Pooling Sub-Stations represented by the QCA.

Under the circumstances, in order to avoid mathematical errors, maintain grid discipline, prevent gaming and ensure operational simplicity in DSM settlement, the Commission decides to allow a fixed nominal deemed schedule of 1 MW for computation of deviation percentage and applicable DSM charges, if Scheduled Generation declared by the generator/QCA is zero and actual generation is available injected into the grid.

Accordingly, the following provision is incorporated in these regulations:
"**Provided that, in cases where the Scheduled Generation declared by the generator/QCA is zero but actual generation is available during the time block, a deemed Scheduled Generation of 1 MW shall be considered for computation of deviation percentage and applicable DSM charges".**

9. Further, the Commission notes that wind and solar capacity (19,197.53 MW) alone contributes to 50.50% of the total installed capacity (38,011 MW) in the State. For effective management of the grid within the stipulated frequency range align with the national grid, it is very much necessary to strengthen the ranges of deviation so as to avoid the instances of grid disturbances and blackout.

10. As per Section 181(2) (zp) of the Electricity Act, 2003 (36 of 2003) read with sub-section (2) of Section 32, sub-sections (1), (2), (4) & (5) of Section 33, Clauses (c) of sub-section (1) of Section 86 and all other powers hereunto enabling, the Karnataka Electricity Regulatory Commission hereby makes the following regulations, namely **Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers of Wind, Solar and WS-Hybrid Generation sources) Regulations, 2026.**

Order

After considering the views/ objections/ comments/ suggestions of the stakeholders on the draft regulations, the Commission hereby approves the **Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers of Wind, Solar and WS-Hybrid Generation sources) Regulations, 2026.**

Sd/-	Sd/-	Sd/-
(P. RAVI KUMAR)	**(H.K. JAGADEESH)**	**(JAWAID AKHTAR)**
CHAIRMAN	**MEMBER (LEGAL)**	**MEMBER**

NOTIFICATION

In exercise of the powers conferred under(zp) of Section 181(2) of the Electricity Act, 2003 (36 of 2003) read with sub-section (2) of Section 32, sub-sections (1), (2), (4) & (5) of Section 33, Clauses (c) of sub-section (1) of Section 86 and all other powers hereunto enabling, the Karnataka Electricity Regulatory Commission hereby makes the following regulations, namely:

1. Short title and commencement:

(1) These Regulations may be called the **Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers of Wind, Solar and WS-Hybrid Generation sources) Regulations, 2026.**

(2) These Regulations shall come into force from the date of their publication in the Karnataka Gazette.

2. Definitions and Interpretation:

In these regulations unless the context otherwise requires:

Sl. No.	Particulars	Definition
1	**Act**	the Electricity Act, 2003 (36 of 2003);
2	**Actual injection/generation**	in a time block means the electricity injected by the generator, measured by the interface meters;
3	**CERC**	the Central Electricity Regulatory Commission referred to in sub- section (1) of Section 76 of the Act:
4	**Commission**	the Karnataka Electricity Regulatory Commission referred to in sub-section (1) of Section 82 of the Act;
5	**Deviation**	in a time block for a WS generators of electricity including hybrid, means its total actual MW-injection minus its total scheduled MW-generation and shall be computed as per these regulations;
6	**Deviation Rate or Deviation Charge**	the charges for deviation applicable for time block as stipulated under these Regulations.
7	**Distribution Licensee**	the Distribution Licensee as defined in Section 2(17) of the Electricity Act, 2003;
8	**Forecasting**	the projection of likely future electricity generation based on measurement of critical meteorological parameters for accurate, real-time measurement of weather to enable optimization of RE generation for improving overall generation predictability, efficiency, enhance grid reliability and to ensure regulatory compliance;
9	**Gaming**	in relation to these Regulations, shall mean an intentional miss-declaration of declared capacity by generator/seller/ QCA in order to make an undue commercial gain through Charge for Deviations;
11	**Generating Company or Generator**	the generating company as defined in Section 2(28) of the Electricity Act, 2003;
12	**Karnataka Electricity Grid Code (KEGC)**	the Grid Code specified by the Karnataka Electricity Regulatory Commission under clause (h) of sub-Section 86 of the Act;
13	**Indian Electricity Grid Code (IEGC)**	the Grid Code specified by the Central Electricity Regulatory Commission under Section 79(1)(h) of the Act;
14	**Intra-State entity**	a person whose metering is done either by the State Transmission Utility or the Distribution Licensee, as the case may be, and energy accounting is done by the State Load Despatch Centre or any other agency so authorized by the Commission;
15	**Interconnecting /Interface points**	a connection point with the Transmission system or Distribution system, as the case may be, at which point an interface meter is installed for an individual Wind/ Solar Generating plant including hybrid or a group of such generating plants;
16	**Interface meters**	interface meters as defined under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time and any re-enactment thereof;
17	**Load Despatch Centre**	National Load Despatch Centre, Regional Load Despatch Centre or State Load Despatch Centre, as the case may be;
18	**MoD Principles**	the principles for the operation of Merit Order Despatch (MoD) and amendments thereof, as specified under KERC (Grid Code) Regulations, 2025 and as amended from time to time;
19	**Open Access Regulations**	the Karnataka Electricity Regulatory Commission (Open Access) Regulations, 2025 as amended from time to time;
20	**Deviation Pool Account**	the State's account maintained by the SLDC, for receipts and payments on account of deviation by wind and solar generators including hybrid.

21	**Pooling station**	the sub-station where pooling of generation of individual wind generators or solar generators including Hybrid is done for interfacing with next higher voltage level, provided that where there is no separate pooling station for a wind / solar generator and the generating station is connected through common feeder and terminated at a substation of ESCOM (Electricity Supply Company) / STU (State Transmission Utility), the substation of ESCOM / STU shall be considered as the pooling station for such wind and solar generator including hybrid, as the case may be;
22	**Qualified Coordinating Agency (QCA)**	the agency appointed by the Wind or Solar Energy Generators including hybrid, connected to a Pooling Sub-Station, or by an individual Generator connected directly to a Sub-Station, to perform the functions and discharge the obligations specified in the State Grid Code;
23	**Regional Entity**	a person whose metering and energy accounting are done at the regional level by the Regional Load Despatch Centre;
24	**Renewable Energy Power (RE Power)**	Power from Solar /Wind Power Generating Systems or a combination thereof, with or without Energy Storage System (BESS). BESS shall be charged using a Wind and / or Solar Power source only.
25	**Renewable Super Rich State (RE Super-rich State)**	a State whose combined installed capacity of solar and wind generating stations under the control area of the State is 5000 MW or more;
26	**Scheduled generation (Scheduled injection)**	at any time or for a time block or any period means ex-bus schedule of generation in MW given by the concerned Load Despatch Centre;
27	**Seller**	a generating station including captive generating plant (selling directly or through trader) or licensee or a company located within the State, injecting power into the State-grid including such system when it is used in conjunction with inter-State transmission system and whose scheduling and / or, metering and energy accounting is coordinated by SLDC, in accordance with Grid Code.
28	**Time Block**	Block of 15 minutes or any such shorter duration as may be notified by the Central Commission or the State Commission for which specified electrical parameters and quantities are recorded by Special Energy Meters with first time block starting from 00.00 hours;

Save as aforesaid and unless repugnant to the context or the subject matter otherwise requires, words and expressions used in these regulations and not defined, but defined in the Act, or any other Regulations of this Commission, shall have the same meaning as assigned to them respectively in the Act or any other Regulations.

3. Objective:

The objective of these Regulations is to facilitate large scale integration of Wind and Solar power generation sources including hybrid for achieving following goals as per provisions of Grid Code, through accurate forecasting, scheduling and deviation settlement through commercial mechanism for Sellers from the Wind and Solar (Hybrid, ESS) sources.

1) Secure, stable and reliable grid operations
2) Encouraging higher availability of Generation
3) To ensure despatch discipline amongst generators/sellers in the State Grid.
4) Serve as a balancing mechanism within the State.
5) To facilitate energy accounting and commercial mechanism for deviation settlement in a transparent manner.

4. Applicability:

These Regulations are applicable to Sellers of Wind - Solar (WS) generating sources including hybrid (with or without ESS) having the following combined contracted capacity at the pooling station or at interface point in case of single generator, irrespective of whether they are supplying power to the ESCOMs or under Open access to third party or captive use within the State and outside State:

Sl. No.	Seller / Generating source	Contracted Capacity in MW
1	Wind Generators (with or without ESS)	10MW and above
2	Solar Generators (with or without ESS)	5MW and above
3	Wind-Solar Generators (Hybrid-with or without ESS)	5 MW and above

Note: In case of ESS, the battery capacity shall not exceed the MW-Connectivity granted at the interface point.

5. Duties of State Load Despatch Centre and Intra State Entities.

Duties of SLDC/ALDC/DCC and Intra State Entities such as STU, Transmission and Distribution licensees and users shall be as per KEGC 2025 and its amendments thereof.

6. Role of Qualifying Coordinating Agency (QCA):

The QCA(s) shall be treated as State Entity for the purpose of this Regulation.

1) The roles and functions of QCA shall be as follows:

a) To act as a nodal agency on behalf of the Seller of wind, solar and hybrid generating sources including energy storage system connected to one or more pooling stations represented by it for the purpose of Grid Code in general and operational and scheduling liaison in particular.

b) To undertake generation forecasting, declaration of combined capability on behalf of generators/sellers, energy storage system at one or more pooling stations to the concerned Load Despatch Centre for the purpose of scheduling.

c) To undertake scheduling, metering and accounting of energy. QCA shall be responsible for pooling of declared availability, de-pooling of despatch schedule, DSM and Reactive account as necessary.

d) To operate and maintain a co-ordination centre manned by qualified and competent personnel for round the clock operational co-ordination and information exchange with the concerned Load Despatch Centre and generating stations.

e) To settle all payments as per DSM Regulations arising out of deviations from its aggregated schedule given by SLDC and the reactive accounting.

2) Any instruction or direction given by the SLDC to QCA/sellers shall be deemed to have been given to the renewable energy generator/seller represented by it.

7. Forecasting and Scheduling:

The forecasting is an estimation of probable generation of wind, solar and Hybrid including ESS power plants in respect of Sellers. Forecasting is an essential pre-requisite for scheduling of the wind and solar generation sources for sellers.

7.1 All WS Generators/sellers (Hybrid, with or without ESS) in co-ordination with SLDC, either by themselves or through a QCA shall submit the week-ahead, day-head and intra- day forecasts to SLDC in accordance with the provisions of KEGC.

The Terms and Conditions for engagement of QCA for forecasting and scheduling activities shall be governed by the mutual/inter-se agreement between the respective generators/sellers and the QCA.

Every QCA shall be registered with the SLDC along with the authorization of the majority of respective wind and solar (Hybrid, ESS) generators/sellers. **SLDC shall submit detailed procedure along with qualifying criteria and fee for registration of the**

QCA/sellers within 60 days from the date of issue of these Regulations for approval of the Commission.

Provided that the wind/solar (Hybrid with or without ESS) generators/sellers who do not wish to avail the services of the QCA of the Pooling Sub-Station appointed by the majority of the concerned generators, shall have the option to avail the services of the SLDC for forecasting and scheduling services subject to the condition that such generators will be responsible for the remaining part of works assigned to QCA as defined in these Regulations.

Provided further that, multiple QCA(s) for a single pooling sub-station shall not be permitted.

Provided also that the service charges for forecasting and scheduling services along with applicable taxes shall be payable to SLDC by the generators if they opt for SLDC forecasting services.

In case individual Generators/sellers connected alone to a sub-station that is designated as a Pooling sub-station may function as a QCA on its own or appoint a separate entity as its QCA.

7.2 The wind and solar (Hybrid, with or without ESS) power generators/sellers connected to the State grid shall, either by themselves or through a QCA, furnish week-ahead, day-ahead and intraday generation and energy requirement schedules for each pooling-station or each generating-station, as the case may be.

The day-ahead forecast shall include wind and solar energy (Hybrid, ESS) generation forecast at regular intervals of 15 minutes' time block for the next day from 00:00 hours of the day for all the 96-time blocks. Week ahead forecast shall be submitted to the SLDC every day for the next seven (7) days in the formats as prescribed by the SLDC.

7.3 The SLDC shall also undertake forecasting of wind and solar (Hybrid, ESS) Power that is expected to be injected into the State grid, by engaging a forecasting agency if required, with an objective of ensuring secure grid operation by planning for the requisite balancing resources, and any wind and solar (Hybrid, ESS) generators will have the option of accepting such forecast for preparing their schedule or provide the SLDC with a schedule based on their own forecast. **While doing so, it shall be ensured that the Demand Forecasting is in accordance with Karnataka Electricity**

Regulatory Commission, (Framework for Resource Adequacy) Regulations, 2024 and its amendments thereof.

7.4 The wind and Solar (Hybrid, with or without ESS) generators/sellers either by themselves or through the QCAs may opt for aggregation of Forecasting and Scheduling of different pooling stations to enable larger geographical integration and furnish scheduling of integrated pools at 15 minutes' time block to SLDC, and in such cases any pooling and de-pooling of the DSM charges shall be done only at their level.

7.5 **Scheduling, Despatch and Frequency of Revisions:** The scheduling, despatch and frequency of revisions for the WS generators/sellers under these Regulations shall be as per the provisions of KERC (Karnataka Electricity Grid Code) Regulations, 2025 and its amendment thereof.

8. Priority for Renewable Energy Sources generation schedule:

The wind and solar (Hybrid, with or without ESS) power and other renewable energy sources shall be given first priority in generation scheduling and dispatching under normal power system operating conditions.

8.1 The Grid operator (SLDC) shall consider the forecast wind and solar (Hybrid, with or without ESS) power generation in the mid-term to long-term, day-ahead and intra-day operation planning processes of scheduling and fully make use of the flexibility from conventional power plants as well as the capacity of inter grid tie-lines to accommodate the maximum wind and solar (Hybrid, with or without ESS) power while maintaining system security, stability and reliability.

8.2 All such generators/sellers either by themselves or through a QCA undertake all operational and commercial responsibilities of the wind and solar (Hybrid, with or without ESS) generating plants and energy consumption relating to forecasting, scheduling and commercial settlement.

8.3 Any commercial impact on account of deviation from the schedule based on the forecast, shall be borne by the wind and solar (Hybrid, ESS) generators/sellers, either directly or through the QCA when transacted through such entities.

9. Metering:

SEMs (Special Energy Meters 0.2s class of accuracy) with AMR technology and having IoT facility shall be provided at the pooling station of wind and solar

(Hybrid, with or without ESS) power plants/sellers at the inter face points of STU/ESCOMs by individual generators/sellers who do not opt for QCA, with a provision for recording and storing all the load survey and billing parameters for every 15 minutes' interval block period and transferring it to the SLDC. The monthly metering data shall be maintained in a database by QCA/generators/ sellers.

The SEMs (Special Energy Meters)/smart meters 0.2s class of accuracy with AMR technology and communication facility, and having IoT facility shall be complying with the provisions of Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended from time to time.

10. Telemetry:

Data telemetry shall be adopted at the turbine/inverter level. Parameters such as turbine availability, power output and real- time weather measurements (wind speed, temperature, pressure etc.) shall be provided by each wind and solar generator/sellers directly or through their QCA to the SLDC.

11. Communication:

(i) The wind and solar (Hybrid, with or without ESS) generator/seller or QCA whose scheduling is done by the SLDC, shall provide full data telemetry and communication facilities to the SLDC.

(ii) A preparatory window shall be provided by the SLDC to the wind and solar (Hybrid, with or without ESS) generator/seller or their QCA to ensure installation of data measurement and telemetry equipment and for the SLDC to prepare its systems and teams for receipt of regular data and schedules.

12. Compliance to Technical Standards:

Every wind and solar (Hybrid, with or without ESS) generator/seller whose scheduling is done by the SLDC shall comply with the technical standards such as for fault ride through, etc., as per the CEA Technical Standards for Connectivity Regulations, as amended from time to time.

13. Deviation Settlement Mechanism (DSM) for wind and solar (Hybrid, with or without ESS) generators/sellers:

a. Every wind and solar generator as referred to in the clause 4 shall henceforth be under the purview of DSM and are liable to pay DSM charges.

b. **Computation of error quantity-**

For wind and solar (Hybrid, with or without ESS) generators/sellers:

The following formula shall be adopted for this purpose:

$$\textbf{\% Error (deviation)} = \frac{\{(\text{Actual Generation} - \text{Scheduled Generation}) \times 100\}}{\{\text{Scheduled Generation}\}}$$

Where, scheduled generation ≠ 0.

Treatment of Zero Scheduled Generation in Computation of error quantity:

"in cases where the Scheduled Generation declared by the generator/QCA is zero but actual generation is available during the time block, a deemed Scheduled Generation of 1MW shall be considered for computation of deviation percentage and applicable DSM charges".

c. **Settlement Period**: Preparation and settlement of 'State Deviation Pool Account' shall be undertaken on monthly basis coinciding with the mechanism followed for regional Deviation Settlement Accounts.

d. The Generators/sellers either by themselves or through their QCAs, shall mandatorily provide to the SLDC, in a format as prescribed by SLDC, the technical specifications at the beginning and whenever there is any change, the data relating to power system output and parameters and weather-related data as applicable shall also be mandatorily provided by such generators to the SLDC in real time.

e. **Tolerance limits and deviation bands:**

The permissible deviation for wind, solar generators/sellers (Hybrid, with or without ESS) are as under:

Sl. No.	Generators/sellers	Deviation range
1	Wind Generators/sellers	± 10 % (within the limits of >90% &<110%)
2	Solar Generators/sellers	± 5 % (within the limits of >95% &<105%)
3	Hybrid Generators/sellers	± 10 % (within the limits of >90% &<110%)
4	ESS (with Wind or Solar or WS – Hybrid) Generators/sellers	Nil

There shall not be any DSM charges, if the deviation is within the above specified limits.

f. The energy charges shall be paid to the generators, as per the actual energy supplied irrespective of the Scheduled quantum of energy for the generators for Intra -State Transactions.

g. DSM charges in case of deviations beyond the permissible limits:

i. The Wind and Solar (Hybrid, with or without ESS) generators having PPA with the ESCOMs or directly supplying power to consumers within the State by availing open access for wheeling the power, shall be liable to pay to DSM pool account for any deviations of the schedules at the rates shown in the following table:

Table 1: Deviation Charge for under or over injection of wind and WS Hybrid generator/seller, for sale of power within Karnataka:

Sl. No.	Absolute error in % terms in 15-minute time block	Deviation charges payable to State deviation pool account (wind and WS Hybrid generator/seller)
1	≤ ±10%	Nil
2	>±10% to ≤ ±20%	Rs 0.25 per kWh for the quantum of short fall or excess energy beyond ± 10% and up to ±20% of deviation from the schedule
3	>20% but ≤±30%	At Rs.0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the shortfall or excess energy beyond 20% and upto 30%
4	more than >±30%	At Rs. 0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the shortfall or excess beyond 20% and up to 30% + Rs.0.75 per unit for the shortfall or excess energy beyond 30%

Table 2: Deviation Charge for under or over injection of solar power, for sale of power within Karnataka:

Sl. No.	Absolute error in % terms in 15-minute time block	Deviation charges payable to State deviation pool account (solar generator/seller)
1	≤ 5%	Nil
2	>5% but ≤±15%	At Rs.0.25 per unit
3	>15% but ≤±25%	At Rs.0.25 per unit for the shortfall or excess beyond 5% and upto 15%+ Rs. 0.50 per unit for the shortfall or excess energy beyond 15% and upto 25%
4	more than >±25%	At Rs. 0.25 per unit for the shortfall or excess beyond 5% and upto 15%+ Rs. 0.50 per unit for the shortfall or excess beyond 15% and up to 25%+ Rs. 0.75 per unit for the shortfall or excess energy beyond 25% (to avoid discrimination)

Provided that the total deviation charges remitted on account of deviations by wind -solar (Hybrid, with or without ESS) generators into State Deviation Pool Account in a financial year shall be capped at the Ceiling Rate of 3 paise per kWh multiplied by the total annual generation at the respective Pooling sub-stations/QCA as applicable.

This provision of capping on annual basis will be reviewed by the Commission after a period of 3 years from the date of Notification.

Provided further that any excess amount of deviation charges remitted beyond the capped amount as per deviation account statement over the financial year shall be adjusted in the subsequent bills without interest.

ii. Deviation Settlement for Inter State Transactions:

a. The Deviation Charges for Over / under-injection by Generators connected to the Intra-State Transmission Network and selling power outside Karnataka shall be as per the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 and the amendments issued time to time for which, the accounting shall be done by the SLDC separately.

b. "Where Wind-Solar (Hybrid, with or without ESS) generator connected to a Pooling Sub-Station avails Short-Term Open Access for inter-State sale through Power Exchanges, SLDC shall undertake energy accounting and DSM settlement based on the actual generation recorded at the generator-end meter after factoring the applicable losses up to the bulk meter at the interface

point, as determined by the SLDC from time to time. The Wind-Solar (Hybrid, with or without ESS) Generators who do not agree for the said accounting methodology, can establish a separate feeder with dedicated metering arrangement for STOA transactions".

c. The SLDC shall maintain the pool account for collection of the DSM charges and publish the details on their website monthly.

14. Information about Curtailment:

Information about any planned curtailment/ shutdown/ system constraint for certain time blocks by the SLDC shall be intimated by the SLDC through E-mail/Short Message Service (SMS) or any other mode of communication and shall also be uploaded on their website. The SLDC shall keep a log of curtailments indicating the time, date and the grid frequency and the quantum of energy curtailed along with the reasons for such curtailment.

Provided that no Deviation Charges shall be payable for any deviations in case of any curtailment imposed on injection of energy for secure Grid operation in emergency situations.

In case of planned curtailment by the SLDC for certain time blocks, the SLDC shall communicate to the generator/seller /QCA regarding the curtailments, and the generator/seller/ QCA shall be responsible to curtail the generation in accordance with the directions of the SLDC and amend its schedule as per advice of the SLDC.

In case, the SLDC fails to communicate about the curtailment to QCA/generator, penalty shall not be levied for deviation for those given time blocks to the extent of curtailment. In case QCA/generator/seller fails to revise the schedule after the same has been communicated by the SLDC, the schedule is deemed to have been revised as specified by the SLDC and the SLDC shall intimate the revised schedules and the penalty shall be levied as per the revised schedules.

15. Schedule of payment of charges for deviation:

a) The payment of charges for deviation shall have a high priority and the concerned constituent shall pay the indicated amounts, within 10 (ten) days of the issue of Statement of charges for deviation by the SLDC, into to the 'State Deviation Pool Account Fund'.

b) If the payments against the Charges for Deviation are delayed by more than two days i.e., beyond 10 (ten) days from the date of issue of the Statement by the SLDC, the defaulting constituent shall have to pay simple interest at 0.04% for each day of delay.

16. Revocation of Registration:

In case of non- compliance of any of the provisions of the Regulations by any generator/seller /QCA, the registration will be revoked by the SLDC after giving due notice, besides encashing the Bank Guarantee/revolving LC towards recovery of arrears of DSM charges.

17. Utilization of fund collected through Deviations-

The amount collected in the Deviation Pool Account Fund by the SLDC shall be transferred to the STU/ESCOMs with approval of the Commission, for utilization of the following:

a) Creating necessary transmission systems of strategic importance based on operational feedback by Load Despatch Centers for relieving congestion in intra-State Systems;
b) Installation of shunt capacitors, series compensators and other reactive energy generators for improvement of voltage profile in the Grid;
c) Installation of standard and special protection schemes, pilot and demonstrative projects and for setting right the discrepancies identified in the protection audits on regional basis;
d) Renovation and Modernization of transmission and distribution systems for relieving congestion; and
e) Any other project in furtherance of the above objectives such as conducting technical studies and capacity building.

18. Power to relax:

The State Commission may by a general or special order for reasons to be recorded in writing and after giving an opportunity to the parties concerned likely to be affected by grant of any relaxation, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

19. Power to amend:

The Commission may from time to time add, vary, alter, modify or amend any provisions of these Regulations on an application by the SLDC or Suo-Moto.

20. Repeal and Savings

1) Save as otherwise provided in these regulations, the Karnataka Electricity Regulatory Commission (Forecasting, scheduling, Deviation Settlement and Related Matters for Wind and Solar generation sources) Regulations, 2015 and amendments thereof shall stand repealed from the date of commencement of these Regulations.

2) Notwithstanding such repeal, anything done or any action taken or purported to have been done or taken, including any procedure, minutes, reports, confirmation or declaration of any instrument executed under the repealed regulations, shall be deemed to have been done or taken under the relevant provisions of these regulations.

21. Removal of difficulties:

If any difficulty arises in giving effect to these Regulations, the Commission may on its own motion or on an application filed by an affected party, issue such directions as may be considered necessary in furtherance of the objective and purpose of these Regulations.

22. Interpretation of Regulations:

If any question arises relating to the interpretation of these Regulations, the decision of the Commission shall be final.

23. Treatment for Gaming:

1. The Commission, either Suo-motu or on a Petition made by the SLDC, or any affected party, may initiate proceedings against any WS generator/seller/ QCA on charges of gaming and if required, may order an inquiry to be made by such officer of the Commission or such other party as the Commission may deem fit. The inquiry officer so appointed shall submit his findings within such time as may be fixed by the Commission and such investigating officer or authority shall exercise all powers as envisaged under Section 128 of the Act.

2. If in the proceedings initiated by the Commission or in the inquiry made in this regard under Clause (1) above, it is proved that any WS generator/seller/ QCA has indulged in gaming, the Commission may without prejudice to any other action under the Act or Regulations made thereunder, disallow any Charges for Deviation to such Wind -Solar Generator/seller/QCA during the period of such gaming.

24. Issue of Suo Motu Orders and Directions:

The Commission may from time-to-time issue Suo-motu orders and practice directions with regard to implementation of these regulations and matters incidental or ancillary thereto, as the case may be.

By the Order of the Commission,

Secretary
Karnataka Electricity Regulatory Commission

PD-68

Government of karnataka

No.SDEL 80 ELM 2025

Karnataka Government Secretariat,
M S Building,
Dr. B. R. Ambedkar veedi,
Bengaluru, Dated:-15.04.2026.

NOTIFICATION

In excercise of the powers conferred by sub-clause (iv) of clause (g) of sub-section (12) of section 2 of the Karnataka Lokayukta Act, 1984 (Karnataka Act 4 of 1985), the Government of Karnataka hereby notifies that the employees of the Government Tool Room and Training Centre which is registered under the Karnataka Societies Registration Act, 1960 to be public servant for the purpose of the application of the provisions of the Karnataka Lokayukta Act, 1984 (Karnataka Act 4 of 1985).

By Order and in the name of the
Governor of Karnataka

(G.UMADEVI)
Under Secretary to Government
Skill Development, Entreprenuership
and Livelihood Department.

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ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ:ಕೌಉಜೀಇ 80 ಉಜೀಇ 2025

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ,
ಬಹುಮಹಡಿ ಕಟ್ಟಡ,
ಡಾ|| ಬಿ.ಆರ್.ಅಂಬೇಡ್ಕರ್ ವೀದಿ,
ಬೆಂಗಳೂರು, ದಿನಾಂಕ:-15.04.2026.

ಅಧಿಸೂಚನೆ

ಕರ್ನಾಟಕ ಲೋಕಾಯುಕ್ತ ಅಧಿನಿಯಮ, 1984 (ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 1985 ರ 4) ರ 2ನೇ ಪ್ರಕರಣದ ಉಪ-ಪ್ರಕರಣ (12)ರ ಖಂಡ (ಜಿ)ಯ ಉಪ-ಖಂಡ (iv)ರ ಅಡಿಯಲ್ಲಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರಗಳನ್ನು ಚಲಾಯಿಸಿ, ಕರ್ನಾಟಕ ಸರ್ಕಾರವು, ಈ ಮೂಲಕ, ಕರ್ನಾಟಕ ಸಂಘಗಳ ನೋಂದಣಿ ಅಧಿನಿಯಮ, 1960ರ ಅಡಿಯಲ್ಲಿ ನೋಂದಾಯಿಸಲ್ಪಟ್ಟ ಸರ್ಕಾರಿ ಉಪಕರಣಾಗಾರ ಮತ್ತು ತರಬೇತಿ ಕೇಂದ್ರದ ನೌಕರರನ್ನು, ಕರ್ನಾಟಕ ಲೋಕಾಯುಕ್ತ ಅಧಿನಿಯಮ, 1984 (ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 1985ರ 4)ರ ಉಪಬಂಧಗಳನ್ನು ಅನ್ವಯಿಸುವ ಉದ್ದೇಶಕ್ಕಾಗಿ ಲೋಕ ನೌಕರರೆಂದು ಅಧಿಸೂಚಿಸಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

(ಜಿ.ಉಮಾದೇವಿ)
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,
ಕೌಶಲ್ಯಾಭಿವೃದ್ಧಿ, ಉದ್ಯಮಶೀಲತೆ ಮತ್ತು
ಜೀವನೋಪಾಯ ಇಲಾಖೆ.

PR-896

ದ್ರಕರು ಹಾಗೂ ಪ್ರಕಾಶಕರು:– ಸಂಕಲನಾಧಿಕಾರಿಗಳು, ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಸರ್ಕಾರಿ ಕೇಂದ್ರ ಮುದ್ರಣಾಲಯ, ಬೆಂಗಳೂರು–59.

THAMMAIAH